Exemption No. 7800A Regulatory Docket No. FAA-2002-11424

Mr. Norman E. Alexander Engineer Federal Express Corporation 2892 Business Park Drive Memphis, TN 38118

Dear Mr. Alexander:

This is in response to your January 6, 2004, letter petitioning the Federal Aviation Administration (FAA) on behalf of Empire Airlines (Empire), for an extension of Exemption No. 7800. That exemption from § 135.143(c)(2) of Title 14, Code of Federal Regulations (14 CFR) permits Empire to operate certain aircraft under part 135 without a TSO-C112 (Mode S) transponder installed on those aircraft.

In your petition, you indicate that the conditions and reasons regarding public interest and safety, presented in the original petition upon which the exemption was granted, remain unchanged.

The FAA has determined that good cause exists for not publishing a summary of the petition in the <u>Federal Register</u> because the requested extension of the exemption would not set a precedent, and any delay in acting on this petition would be detrimental to Empire.

On January 29, 1987, the FAA issued Air Traffic Control Radar Beacon System and Mode S transponder Requirements in the National Airspace System Final Rule (52 FR 3380). In part, this rule requires that any newly installed aircraft transponder, used for operations under

14 CFR parts 121 and 135, before January 1, 1992, may be a Mode A transponder provided the transponder was manufactured prior to January 1, 1990; and that only Mode S transponders could be newly installed in these aircraft after January 1, 1992.

In 1995 the ground sensors necessary for Mode S transponders, as planned by the FAA, had not become fully operational. Without complete functioning ground sensors, the system capacity envisioned by the use of a Mode S transponder offered no reduction in ATC separation criteria or increase in traffic flow over that provided by a Mode C transponder. Therefore, the FAA began to reconsider the Mode S requirement. In the interim, the FAA issued a number of exemptions to individuals who were required by the above rule to install ATC transponders since the necessary ground components for the system were not available.

In May 1996 the FAA proposed to rescind the Mode S transponder requirement for all aircraft operations under part 135 and for certain aircraft operations under part 121 that are not required to have Traffic Alert and Collision Avoidance System (TCAS) II (61 FR 26036). The agency articulated several reasons for the proposed rescission: (1) the FAA's revised strategy of multiple air-ground data links managed through an Aeronautical Telecommunications Network would remove the requirement for Mode S transponders; (2) operational experience with the Mode S ground sensors has shown that most surveillance enhancements can be achieved by the Mode S ground sensors with the present mixed population of airborne transponders; and (3) the use of Mode S transponders for aircraft, other than those required to have TCAS II, does not offer, nor is it expected to offer, any significant safety advantage in the current or future airspace environment. The proposal also noted that studies and analysis were being conducted on advanced methods of aircraft separation to support the FAA's goal of "free flight" and invited comment on whether future equipage of Mode S transponders should be mandatory for certain areas of operation.

Many Mode S ground sensors have become fully operational since the initial grants of exemption in 1995 and the issuance of the 1996 NPRM. Mode S ground sensors now cover most of the U.S., including all major airports. However, even with the ground sensors in place, the FAA is reconsidering the comments submitted, the current aviation environment and its position on Mode S equipage requirements. Therefore, the FAA does not find that public interest would be served by compelling certain individuals to purchase and install Mode S transponders at this time.

In consideration of the foregoing, I find that a grant of exemption is in the public interest. Therefore, pursuant to the authority contained in 49 U.S.C. §§ 40113 and 44701, delegated to me by the Administrator, Exemption No. 7800 is hereby amended by extending its June 30, 2004, termination date to December 31, 2004, unless sooner superseded or rescinded. On January 1, 2005, all aircraft operating under 121 must be TCAS compliant, thereby requiring a Mode S transponder.

All other conditions and limitations of Exemption No. 7800 remain the same. This letter shall be attached to, and is a part of, Exemption No. 7800.

Sincerely,

/s/

Ida M. Klepper Acting Director, Office of Rulemaking